

III. Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims

1 - 40 (cancelled)

41. (newly added) A bearing assembly for a rotor, the assembly comprising:

a cage member surrounding the rotor;

a housing member surrounding the cage member; and

at least one axially-extending groove formed in the housing member to form a cantilevered portion extending between the groove and the corresponding surface of the cage member.

42. (newly added) The bearing assembly of claim 41 further comprising at least one tilt pad disposed in a recess in the cage member and adapted to engage the rotor.

43. (newly added) The bearing assembly of claim 41 wherein a clearance is formed between at least a portion of the radial outer surface of the cage member and the corresponding portion of the inner surface of the housing member; and wherein a passage extends through the housing member and registers with the clearance for passing oil to the clearance.

44. (newly added) The assembly of claim 43 further comprising:

a recess formed in the radial inner surface of the cage member;

a passage extending through the cage member and from the clearance to the recess for receiving the oil from the clearance and passing it to the recess; and

at least one tilt pad disposed in the recess for receiving the oil and adapted to engage the rotor.

45. (newly added) The assembly of claim 43 wherein a first portion of the radial outer surface of the cage member extends in a slightly spaced relation to the corresponding portion of the inner surface of the housing member to form the clearance, and a second portion of the radial outer surface of the cage member projects from the first portion in a radial direction and engages the

corresponding portion of the inner surface of the housing member to prevent oil leakage from the clearance.

46. (newly added) The assembly of claim 41 wherein the cage member and the housing member are annular.

47. (newly added) The assembly of claim 41 wherein the cantilevered portion forms a mechanical spring.

48. (newly added) A bearing assembly for a rotor, the assembly comprising:

a cage member surrounding the rotor;

a housing member surrounding the cage member;

at least one axially-extending groove formed in the cage member to form a cantilevered portion extending between the groove and the corresponding surface of the housing member; and

at least one axially-extending groove formed in the housing member to form a cantilevered portion extending between the groove and the corresponding surface of the cage member.

49. (newly added) The bearing assembly of claim 48 wherein the cantilevered portion of the cage member extends between the groove of the cage member and the corresponding cantilevered portion of the housing member; and wherein the cantilevered portion of the housing member extends between the groove of the housing member and the corresponding cantilevered portion of the cage member.

50. (newly added) The bearing assembly of claim 48 further comprising at least one tilt pad disposed in a recess in the cage member and adapted to engage the rotor.

51. (newly added) The bearing assembly of claim 48 wherein a clearance is formed between at least a portion of the radial outer surface of the cage member and the corresponding portion of the inner surface of the housing member; and wherein a passage extends through the housing member and registers with the clearance for passing oil to the clearance.

52. (newly added) The assembly of claim 51 further comprising:

a recess formed in the radial inner surface of the cage member;

a passage extending through the cage member and from the clearance to the recess for receiving the oil from the clearance and passing it to the recess; and

at least one tilt pad disposed in the recess for receiving the oil and adapted to engage the rotor.

53. (newly added) The assembly of claim 51 wherein a first portion of the radial outer surface of the cage member extends in a slightly spaced relation to the corresponding portion of the inner surface of the housing member to form the clearance, and a second portion of the radial outer surface of the cage member projects from the first portion in a radial direction and engages the corresponding portion of the inner surface of the housing member to prevent oil leakage from the clearance.

54. (newly added) The assembly of claim 48 wherein the cage member and the housing member are annular.

55. (newly added) The assembly of claim 48 wherein each the cantilevered portion forms a mechanical spring.